

A.) AMENDMENTS TO THE CLAIMS:

1. (currently amended) A method of assigning a network address to a network access device connected to through an access network infrastructure connected to one of a plurality of available service provider networks, comprising the steps of:

storing a database that maintains separate ranges of network addresses for each of a plurality of available service provider networks, the network addresses for allocation to separate subscribers of the available service provider networks;

receiving a request from a subscriber operating a network access device selecting a service provided by to subscribe to a service provider network and subscribed to by the subscriber from the plurality of available service networks;

allocating a network address from a pool the ranges of addresses allocated to subscribers of the service provider network, and

assigning the network address to the network access device using a host configuration protocol wherein the network address is utilized by the access network infrastructure to forward packets from the network access device to the service provider network providing the selected service.

2. (currently amended) The invention method of claim 1 wherein the host configuration protocol is a Dynamic Host Configuration Protocol (DHCP) DHCP.

3. (previously presented) The invention of claim 1 further comprising the step of authenticating the subscriber before assigning the network address to the network access device.

4. (currently amended) The invention method of claim 1 wherein the service provider networks utilize the Internet Protocol and wherein the addresses are comprise Internet Protocol addresses.

5. (currently amended) The invention method of claim 4 wherein the plurality of service provider networks are operated by different Internet Service Providers.

6. (currently amended) The invention method of claim 4 wherein the plurality of service provider networks offer access to different Internet Protocol-based services.

7. (currently amended) A method of assigning a network address to a network access device connected to through an access network infrastructure connected to one of a plurality of service provider networks, comprising the steps of:

storing a database that maintains separate ranges of network addresses for each of a plurality of available service provider networks, the network addresses for allocation to separate subscribers of the available service provider networks;

receiving a request from a subscriber operating a network access device selecting a service provided by to select a service provider network from the plurality of available service provider networks and to which the subscriber is subscribed;

allocating a network address from a pool the range of network addresses allocated to subscribers of the service;

receiving authentication information from the subscriber;

transmitting the authentication information to the service provider network; and

if when the service network authenticates the subscriber, assigning the network address to the network access device using a host configuration protocol, wherein the network address is utilized by the access network to forward packets from the network access device to the service provider network providing the selected service.

8. (currently amended) The invention method of claim 7 wherein the host configuration protocol is a Dynamic Host Configuration Protocol (DHCP) DHCP.

9. (currently amended) The invention method of claim 7 wherein the service network authenticates the subscriber using a Remote Authentication Dial In User Service (RADIUS) RADIUS protocol.

10. (currently amended) The invention method of claim 7 wherein the service provider networks utilize the Internet Protocol and wherein the addresses are Internet Protocol addresses.

11. (currently amended) The invention method of claim 7 wherein the plurality of service provider networks are operated by different Internet Service Providers.

12. (currently amended) The invention method of claim 7 wherein the plurality of service provider networks offer access to different Internet Protocol-based services